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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,898	06/05/2001	Iain Hogg	01-627	5142

7590 03/26/2007  
McDonnell Boehnen Hulbert & Berghoff  
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EXAMINER
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GOLD. AVI M

ART UNIT	PAPER NUMBER
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2157

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/873,898

Applicant(s)

HOGG ET AL.

Examiner

Avi Gold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3,5-16 and 18-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-16 and 18-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is responsive to the amendment filed on April 17, 2006. Claims 1, 16, 30, and 31 were amended. Claims 1, 3, 5-16, and 18-33 are pending.

### ***Response to Amendment***

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 6-14 and 21-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kumano et al., U.S. Patent No. 6,502,132.

Kumano teaches the invention as claimed including a network monitoring system, monitoring device, and monitored device (see abstract).

Regarding claim 6, Kumano teaches a method of monitoring a network comprising the steps of determining the number of devices in the network to be monitored, and changing the monitoring procedure in accordance with the determined number (col. 15, lines 44-67, col. 16, lines 1-5, Kumano discloses a counter of the

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number of devices which can change the summary status which then changes the control command).

Regarding claim 7, Kumano teaches a method as claimed in claim 6 in which the monitoring procedure includes interrogating the devices in the network and the step of changing the monitoring procedure comprises changing the frequency of interrogation of devices as the determined number changes (col. 16, lines 8-18, Kumano discloses polling times changing).

Regarding claim 8, Kumano teaches a method as claimed in claim 6 in which the monitoring procedure includes interrogating the devices using a protocol and the step of changing the monitoring procedure comprises changing the protocol used to monitor devices as the determined number changes (col. 16, lines 8-18, Kumano discloses polling operation changes based on time and summary status).

Regarding claim 9, Kumano teaches a method as claimed in claim 6 including the step of providing one or more ranges of numbers, and determining which range the determined number falls into, and changing the monitoring procedure in accordance with the range of numbers in which the determined number falls (col. 15, lines 44-67, col. 16, lines 1-5).

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Regarding claim 10, Kumano teaches a method as claimed in claim 6 including the step of dividing the devices into types and monitoring the different types of devices using different monitoring procedures (col. 7, lines 64-67, col. 8, lines 1-9).

Regarding claim 11, Kumano teaches the method as claimed in claim 10 in which said defined types of device comprise core devices and edge devices (col. 7, lines 64-67, col. 8, lines 1-9).

Regarding claim 12, Kumano teaches a method as claimed in claim 10 in which said defined types of device are further defined in terms of the number of other devices a particular device is connected to (col. 7, lines 64-67, col. 8, lines 1-9).

Regarding claim 13, Kumano teaches a method as claimed in claim 6 in which the step of determining the number of devices is initiated when a monitored device is added or removed from the network (col. 15, lines 44-67, col. 16, lines 1-5).

Regarding claim 14, Kumano teaches a computer readable medium containing instructions loadable into a digital computer, said computer readable medium operating in accordance with the method as claimed in claim 1 (col. 7, lines 64-67, col. 8, lines 1-9).

Claims 21-29 do not teach or define any new limitations above claims 6-14 and therefore are rejected for similar reasons.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 14-16, 18-20, and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kumano further in view of Pyotsia et al., U.S. Patent No. 6,317,701.

Kumano teaches the invention substantially as claimed including a network monitoring system, monitoring device, and monitored device (see abstract). (see abstract).

As to claim 1, Kumano teaches a method of monitoring a network of devices comprising the step of defining at least two types of device, wherein the at least two types of device comprise core devices and edge devices, and monitoring the different types of device using different monitoring procedures, in which said different monitoring procedures comprise interrogating said different types of device at different time intervals (col. 7, lines 64-67, col. 8, lines 1-9, Kumano discloses network monitoring system monitoring devices connected to a network with each device having various statuses, col. 9, lines 20-28, Kumano discloses polling intervals).

Kumano fails to teach the limitation further including the wherein the different time intervals are determined in accordance with the type of device.

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However, Pyotsia teaches field device management in industrial process systems and similar systems (see abstract). Pyotsia teaches the use of optimal maintenance and performance intervals based on the type of device (col. 3, lines 29-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kumano in view of Pyotsia to use different time intervals based on the type of device. One would be motivated to do so because it leads to optimal monitoring visits, which is more efficient.

Regarding claim 3, Kumano teaches a method as claimed in claim 1 in which said different monitoring further procedures comprise interrogating said devices at different protocols (col. 12, lines 49-67, col. 13, lines 1-5, Kumano discloses different units for analyzing the devices).

Regarding claim 5, Kumano teaches a method as claimed in claim 1 in which said defined types of device are further defined in terms of the number of other devices a particular device is connected to (col. 7, lines 64-67, col. 8, lines 1-9, Kumano discloses a plurality of monitored devices connected to the network having various statuses).

Claims 15, 16, 18-20, 32, and 33 do not teach or define any new limitations above claims 1, 3, and 5 and therefore are rejected for similar reasons.

Regarding claim 30, Kumano teaches a method of monitoring a network of devices comprising defining at least two types of device, wherein the at least two types of device comprise core devices and edge devices, and monitoring the different types of device using different monitoring procedures, in which said different monitoring procedures comprise interrogating said devices at different intervals, the method further comprising determining the number of devices in the network to be monitored, and further changing the monitoring procedure in accordance with the determined number (col. 7, lines 64-67, col. 8, lines 1-9, col. 9, lines 20-28, col. 15, lines 44-67, col. 16, lines 1-5).

Kumano fails to teach the limitation further including the wherein the different time intervals are determined in accordance with the type of device.

However, Pyotsia teaches the use of optimal maintenance and performance intervals based on the type of device (col. 3, lines 29-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kumano in view of Pyotsia to use different time intervals based on the type of device. One would be motivated to do so because it leads to optimal monitoring visits, which is more efficient.

Regarding claim 31, Kumano teaches a computer network comprising a plurality of devices, said computer network including means for defining at least two types of device, wherein the at least two types of device comprise core devices and edge devices, and a monitor adapted to monitor the different types of device using different



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monitoring procedures, said monitor being adapted to interrogate said different types of device at different time intervals, said network further comprising means for determining the number of devices in the network to be monitored, and means for further changing the monitoring procedure in accordance with the determined number (col. 7, lines 64-67, col. 8, lines 1-9, col. 9, lines 20-28, col. 15, lines 44-67, col. 16, lines 1-5).

Kumano fails to teach the limitation further including the wherein the different time intervals are determined in accordance with the type of device.

However, Pyotsia teaches the use of optimal maintenance and performance intervals based on the type of device (col. 3, lines 29-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Kumano in view of Pyotsia to use different time intervals based on the type of device. One would be motivated to do so because it leads to optimal monitoring visits, which is more efficient.

### ***Response to Arguments***

4. Applicant's arguments filed April 17, 2006 have been fully considered but they are not persuasive.

Regarding the argument to claims 1 and 6, the applicant argues that the reference, Kumano, does not disclose the use of changing the monitoring procedure in accordance with the number of devices in the network as determined. The examiner respectfully disagrees, as seen in, col. 15, line 44 – col. 16, line 18, there is a counter of

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the number of devices which can change the summary status which then changes the control command and a polling operation changes based on time and summary status. In addition, the applicant relies on figures 2 and 3 in their arguments. Those are figures that reference related art, not the art that is being relied upon in the rejection.

Regarding the argument to claims 6, the applicant argues that the reference, Pyotsia, does not disclose intervals based on the type of device. The examiner respectfully disagrees, as seen in, col. 3, lines 26-36, there is a field device manufacturer that may monitor all its field devices in different parts of the world and adjust an optimal performance and optimal maintenance intervals for them, them meaning the different device types. This is shown further in col. 4, line 60 – col. 5, line 39, where a device module is specific for each device type and that each device module collects data at various intervals.

5. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the knowledge is generally available to one of ordinary skill in the art.

### **Conclusion**

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,662,222 to Ishii et al.

U.S. Pat. No. 6,282,175 to Steele et al.

U.S. Pat. No. 6,244,758 to Solymar et al.

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U.S. Pat. No. 6,115,743 to Cowan et al.

U.S. Pat. No. 6,718,384 to Linzy.

U.S. Pat. No. 6,041,347 to Harsham et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

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